

From: [Mitchell, Tanya](#)
To: [Hagerman, Paul](#); [Amy Darpinian](#)
Subject: RE: Rolling Knolls MW-20 installation
Date: Monday, June 01, 2015 2:26:50 PM

It is my understanding that CDM reported that the installation of MW-20 was inconsistent with the SAP. If this is the case please provide the discrepancies by citing the Sap and the ARCADIS field log difference.

I'm not quite clear of your intent with the email response below.

Thanks,
Tanya

From: Hagerman, Paul [mailto:HagermanPR@cdmsmith.com]

Sent: Monday, June 01, 2015 2:20 PM

To: Mitchell, Tanya; Amy Darpinian

Subject: RE: Rolling Knolls MW-20 installation

Yes, we reviewed and it is consistent with what we had observed and flagged in an email last week. As a follow up, their consultant started development of the well last Thursday. MW-20 was purged to develop the well. The water level was initially at ground level in the well. ARCADIS intended to purge about 15 gallons (10 well volumes) to develop the well, however the well went dry after about 30-45 seconds of pumping at about 2 gallons per minute. The well recharged after 15-20 minutes. Ultimately, ARCADIS reduced the flow rate to low flow levels (about 500 mL/min) and purged a total of about 7 gallons. Water from the well cleared up and ARCADIS intends to complete development tomorrow.

Our view on this is that since the well is not set in competent material, the results may always be biased high for unfiltered samples for analytes that might be sorbed onto organic materials that might end up in the sample due to turbidity.

On the other hand, if they had set the screen deeper where the competent material was, the screen would have been set at a depth that could miss contamination and would also be the only well amongst those along the perimeter with a screen set at that depth.

The location, while desirable for being down gradient of areas we'd like to delineate, does not allow for setting a screen interval that meets the SOP and data collection objectives.

Paul Hagerman, P.E.

CDM Smith

110 Fieldcrest Avenue, #8

6th Floor

Edison, NJ 08837

phone: (732) 225 7000 (operator)

phone: (732) 590 4663 (direct dial)

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From: Mitchell, Tanya [mailto:Mitchell.Tanya@epa.gov]

Sent: Monday, June 01, 2015 1:58 PM

To: Hagerman, Paul; Amy Darpinian

Subject: RE: Rolling Knolls MW-20 installation

Hello All,

Can you provide the status of your review of the documentation provided by ARCADIS regarding MW-20?

Thanks,
Tanya

From: Mitchell, Tanya
Sent: Thursday, May 28, 2015 2:04 PM
To: Paul Hagerman; Amy Darpinian
Subject: FW: Rolling Knolls MW-20 installation

Hello all,
Please review the attached information and let me know if it is consistent with the SAP and any approved FCRs. We can discuss further on Monday afternoon, if necessary.
Thanks,
Tanya

From: Walls (Young), Suzy [<mailto:Suzy.Walls@arcadis-us.com>]
Sent: Thursday, May 28, 2015 1:25 PM
To: Mitchell, Tanya
Cc: Persico, John; ' (pete.bergeron@chevron.com)'; Draikiwicz, Michael (michael.draikiwicz@novartis.com); Gary M. Fisher
Subject: RE: Rolling Knolls MW-20 installation

Tanya,

Here is a summary of the construction of MW-20. I have also attached the logbook notes and the core log.

Thursday – May 21

- Finished constructing boardwalk and work platform at MW-20.
- Hand auger MW-20 to 5 ft bgs. Black-dark brown organic rich soil. No clay encountered.
- Boring advanced to 15 ft bgs. 1 ft of clay recovered from 9 to 10 ft bgs. Likely organic matter, muck and roots from 5 to 9 ft bgs. Limited recovery from 10 to 15 ft. Likely dark grey fine-medium sands from 10 to 15 ft.

Friday – May 22

- Advance boring at MW-20 from 15.0 to 17.0 feet. Clay from 16.0 to 17.0 ft.
- Boring abandoned with grout. Will resume drilling after grout cures.

Tuesday – May 26

- Install MW-20 with 6 inch casing from 0.0 to 4.0 ft bgs. Bentonite/cement seal from 0.0 to 5.0 ft bgs. No. 00 sand from 5.0 to 5.2 ft. bgs. Sand filter pack from 5.0 to 9.0 ft bgs. Screen constructed from 5.5 to 9.0 ft bgs.

Thanks,
Suzy

From: Mitchell, Tanya [<mailto:Mitchell.Tanya@epa.gov>]
Sent: Wednesday, May 27, 2015 6:59 AM
To: Walls (Young), Suzy
Cc: Persico, John; ' (pete.bergeron@chevron.com)'; Draikiwicz, Michael (michael.draikiwicz@novartis.com); Gary M. Fisher
Subject: Rolling Knolls MW-20 installation
Importance: High

Confirmation of this email is requested.

Suzy,

It has been report that there was some complications with the installation of MW-20. Some questions have been raised regarding how the well was actually screened and constructed as opposed to what was approved. As previously requested, please notify me when there is any exception to the approved SAP.

Please forward a brief summary of the installation of MW-20 and a copy of the field logs associated with the installation of MW-20. This information is requested ASAP and no later than COB May 28, 2015.

Should you have any questions or concerns regarding this email, please notify me immediately upon receipt of this email.

Regards,

Tanya